

Dr Hadwen Trust for Humane Research

Press release

28 July 2010

Experiments using Genetically Modified Animals Increase

Statistics released by the Home Office (Tuesday, 27 July 2010) show that the number of genetically modified animals used in experiments has increased by 10%.

The Dr Hadwen Trust was disappointed to see this rise as it believes that many within the scientific community and also the public are too eager to see genetic engineering as tomorrow's universal response to every human problem.

Many scientists acknowledge that genetically modified animals are very poor models in helping to understand and provide cures for human diseases. However, rather than decreasing, the use of genetically modified animals has accounted for a 33% increase in the total number of procedures in 2009 compared to 2000.

In addition, there are obvious ethical drawbacks due to the animal suffering caused and these cutting edge techniques offer limited value to human medicine.

Dr Sebastien Farnaud, Science Director of the Dr Hadwen Trust, said:

“Using genetically modified animals is a relatively recent approach that many researchers hope will lead to better models to help understand and develop treatments for human diseases. However, despite two decades of high expectations of what can be achieved through research on GM animals, the question remains whether the limited benefits of genetically modifying live animals outweighs its ethical drawbacks. We hope that more scientists will move away from such experiments and focus on more relevant research using human models.”

As an example, in an attempt to study cystic fibrosis in the early 90s, mice were genetically modified to have the same mutations that cause the genetic defect in humans. This was hailed as a medical breakthrough, but hopes crashed when the mice developed different symptom patterns to those of human patients.

Fundamental differences in anatomy, pharmacology and physiology between mice and people accounted for the variations. In fact, the same gene mutation can produce variable symptoms even in different mouse breeds.

In 2008, similarly disappointing results were obtained with muscular dystrophy.

The Dr Hadwen Trust for Humane Research funds cutting edge research at universities across the UK. The projects carried out by its grant holders aim to replace the use of animals in medical research which will lead to more relevant, high quality research. Current projects include research into breast cancer, multiple sclerosis, cystic fibrosis, skin cancer and brain infections amongst others.

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For more information or to arrange interviews contact Amanda Gent,
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Notes to Editor:

Statistics of Scientific Procedures on Living Animals – Great Britain,
2009 -

Full details of the statistics can be viewed here:

<http://rds.homeoffice.gov.uk/rds/scientific1.html>

Summary

- Breeding to produce genetically modified (GM) animals and harmful mutants (HM)
- Harmful Mutations (HM) increased by 10% (+143,000) to 1.5 million procedures, accounted for by an increase for mice (+161,000).
- Excluding such breeding, the numbers of procedures fell from 2.3 million to 2.1 million (-8% or -180,000).
- For the first time, procedures using genetically 'normal' animals were less than half the total (48%).
- There was an increase of 9% in numbers of procedures involving mice, a fall of 7% for non human primates, and falls for most other species.
- The total number of procedures was a third higher (+33% or +905,000) in 2009 than in 2000, mostly accounted for by an increase in breeding to produce GM and HM animals (+834,000 higher, of which mice +734,000). Excluding such breeding, the total was slightly higher in 2009 than in 2000 (+3% or +70,000)